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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,370

09/19/2005

Elias Jonsson

P16694US2

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01/22/2009

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EXAMINER

TORRES, JUAN A

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

01/22/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/530,370	<b>Applicant(s)</b> JONSSON, ELIAS	
	<b>Examiner</b> JUAN A. TORRES	<b>Art Unit</b> 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

The modifications to the drawings were received on 11/26/2008. These modifications are accepted by the Examiner.

In view of the amendment filed on 11/26/2008, the Examiner withdraws Drawing objections of the previous Office action.

### ***Claim Objections***

Claims 1-16 are objected to because of the following informalities:

Regarding claim 1, the recitation in line 7 of claim 1 "if" seems to be improper because the use the word "if" render the claim indefiniteness (see 35 USC 112 2nd paragraph indefinite); it is clear what it happens if the condition is met, but if that condition is not met is indefinite. It is suggested to change the word "if" to "when". .  
Appropriate correction is required.

Regarding claim 5, the recitation in lines 1-2 of claim 5 "The method according to claim 4, that the estimated interference is filtered" seems to be improper, because it is improperly constructed" (seems to be improper because it is not a proper sentence); it is suggested to be changed to "The method according to claim 4, wherein the estimated interference is filtered"

Regarding claims 2-7, 15 and 16, they are objected because they depend directly or indirectly from claim 1 and claim 1 is objected.

Regarding claim 8, the recitation in line 8 of claim 1 "if" seems to be improper because the use the word "if" render the claim indefiniteness (see 35 USC 112 2nd

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paragraph indefinite); it is clear what it happens if the condition is met, but if that condition is not met is indefinite. It is suggested to change the word “if” to “when”. .

Appropriate correction is required.

Regarding claims 9-14, they are objected because they depend directly or indirectly from claim 8 and claim 8 is objected.

Regarding claim 16, the recitation in lines 3 and 6 of claim 16 “if” seems to be improper because the use the word “if” render the claim indefiniteness (see 35 USC 112 2nd paragraph indefinite); it is clear what it happens if the condition is met, but if that condition is not met is indefinite. It is suggested to change the word “if” to “when”.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 and 15-16 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 1-7 and 15-16, claims 1-7 and 15-16 are rejected under 35 U.S.C. § 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent<sup>1</sup> and recent Federal Circuit decisions<sup>2</sup> indicate that a statutory “process” under 35 U.S.C. 101 must (1) be tied to another statutory category

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<sup>1</sup> *Diamond v. Diehr*, 450 U.S.175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972);

*Cochrane v. Deener*, 94 U.S. 780, 787-88(1876).

<sup>2</sup> *In re Bilski*, 88 USPQ 2d 1385 (Fed.Cir.2008).

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(such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example the instant claims neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-8 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh (US 20030100267 A1) in view of Mochizuki (US 20020082038 A1).

Regarding claims 1, 8 and 15, Itoh discloses verifying a transmitted Transmit Power Control (TPC) command (figure 14 block 84, paragraphs [0229]-[0230] and [0256]-[0057], [0271], [0379]-[0381]), and giving a SIR estimation depending on the result of said TPC verification (figure 14 block 85, paragraphs [0229]-[0231] and [0245]-[0261], [0297]-[0302]). Itoh doesn't disclose determining if the TPC command has been received correctly and weighting the pilot and data symbols. Mochizuki discloses

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determining if the TPC command has been received correctly (paragraph [0150]) and weighting the pilot and data symbols (figures 5, 7 and 8 paragraphs [0179] and [0186]). Itoh and Dabak are analogous art because they are from the same field of endeavor of TPC in CDMA. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate in the system disclosed by Itoh the determination and weighting disclosed by Mochizuki. The suggestion/motivation for doing so would have been to improve the performance (Mochizuki paragraphs [0150] and [0179], to support Examiner rejection see also Grandell ("Closed-loop power control algorithms in soft handover for WCDMA systems", IEEE International Conference on Communications, 2001, ICC 2001 Volume 3, 11-14 June 2001 Page(s):791 - 795 vol.3) page 792 third paragraph left column).

Regarding claims 4 and 11, Itoh and Mochizuki disclose claims 1 and 8, Itoh also discloses that that interference is estimated from said pilot symbols (paragraphs [0192], [0211]).

Regarding claims 5 and 12, Itoh and Mochizuki disclose claims 4 and 11, Itoh also discloses that the estimated interference is filtered (figure 14 block 86, averaging paragraphs [0280], [0296], [0300]-[0306], [0323]-[0324]. See Applicant also specification page 2 lines 23-25).

Regarding claims 6 and 13, Itoh and Mochizuki disclose claims 1 and 8, Itoh also discloses that the first unit is a base station and the second unit is a mobile unit (abstract).

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Regarding claims 7 and 14, Itoh and Mochizuki disclose claims 1 and 8, Itoh also discloses that the first unit is a mobile unit and the second unit is a base station (abstract)

Claims 2-3 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh and Mochizuki as applied to claims 1 and 8 above, and further in view of Dabak (US 6804311 B1).

Regarding claims 2 and 9, Itoh and Mochizuki disclose claims 1 and 8. Itoh and Mochizuki don't specifically disclose taking into account power changes in said data symbols due to prior TPC changes, Dabak discloses taking into account power changes in said data symbols due to prior TPC changes (abstract, figure 5 column 4 line 49-65). Itoh and Mochizuki and Dabak are analogous art because they are from the same field of endeavor of CDMA. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate in the system disclosed by Itoh and Mochizuki the weighting disclosed by Dabak. The suggestion/motivation for doing so would have been to improve the performance taking into account averaging data.

Regarding claims 3 and 10, Itoh and Mochizuki disclose claims 1 and 8. Itoh and Mochizuki doesn't disclose encoding said data symbols using space-time transmit diversity (STTD). Dabak discloses encoding said data symbols using space-time transmit diversity (STTD) (figures 1-4 column 2 lines 2-44). Itoh and Dabak are analogous art because they are from the same field of endeavor of CDMA. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate in the system disclosed by Itoh and Mochizuki the STTD encoding disclosed

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by Dabak. The suggestion/motivation for doing so would have been to improve the performance (column 1 lines 62-64).

Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh and Mochizuki as applied to claims 1 and 8 above, and further in view of Young-Shin Yoon, "Adaptive SIR estimation in WCDMA systems", IEEE 55<sup>th</sup> Vehicular Technology Conference, 2002, VTC Spring 2002. Volume 1, 6-9 May 2002 Page(s):275 - 279 vol.1).

Regarding claims 2 and 9, Itoh and Mochizuki disclose claims 1 and 8. Itoh and Mochizuki don't specifically disclose taking into account power changes in said data symbols due to prior TPC changes, Young-Shin Yoon discloses taking into account power changes in said data symbols due to prior TPC changes (abstract, section 3 figures 2 and 3). Itoh and Mochizuki and Young-Shin Yoon are analogous art because they are from the same field of endeavor of CDMA. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate in the system disclosed by Itoh and Mochizuki the weighting disclosed by Young-Shin Yoon. The suggestion/motivation for doing so would have been to improve the performance (Young-Shin Yoon abstract).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a) Willenegger (US 20030174686 A1) discloses reducing inter-channel interference in a wireless communication system.



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b) Mouldsley (US 6845237 B2) discloses communication of information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUAN A. TORRES whose telephone number is (571)272-3119. The examiner can normally be reached on 8-6 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Juan Alberto Torres  
01/15/2009

/Juan A Torres/  
Primary Examiner, Art Unit 2611